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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,922	04/12/2004	Naofumi Tamai	1081.1198	2421

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EXAMINER

BELLO, AGUSTIN

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/821,922

Applicant(s)

TAMAI, NAOFUMI

Examiner

Agustin Bello

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/12/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoo (U.S. Patent No. 6,519,062).

Regarding claims 1 and 8, Yoo teaches a WDM network system an optical wavelength comprising: division multiplexed (WDM) transmission path (reference numeral 204 in Figure 4); a plurality of sub-networks each accommodating client (reference numeral 102 in Figure 4); and a plurality of WDM nodes (reference numeral 114 in Figure 4) each corresponding to each of the plurality of sub-networks respectively and connected with the optical wavelength division multiplexed transmission wherein each of the plurality of WDM nodes includes a wavelength converting unit (reference numerals 12 and 18 in Figures 2 and 3) for controlling oscillation frequencies in conformity with a destination address for which the communication destination is identified by an IP address; and a cross-connecting unit (reference numeral 16 in Figure 2 and 3) for cross-connecting the route directed to an adjacent WDM node for connecting with the communication destination.

Regarding claims 2 and 9, Yoo teaches that each of the WDM nodes includes a routing table (column 9 lines 5-58) for storing the IP address of the corresponding sub-network, a WDM

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node of an upper order of the sub-network, a cross-connection ID identifying the path, a wavelength used and information of the WDM node to which the main signal is first sent when reaching the target sub-network using a predetermined path, and wherein the control of the oscillation frequency by the wavelength converting unit and the cross-connecting of the route are conducted by referring to the routing table (column 9 lines 19-24 and column 10 line 59 – column 11 line 2, reference numeral 322 in Figure 21).

Regarding claims 3 and 10, Yoo teaches that when an IP address of a sub-network in which a client is accommodated is notified from the client issuing a request for connection, the corresponding node registers the IP address of the sub-network into the routing table (inherent in the header that is stripped off via element 1302 in Figure 21), and wherein each WDM node exchanges the IP address information of the sub-network retained in the routing table with adjacent nodes (column 8 lines 33-39 and via DCN from NC&M to the network elements column 9 lines 19-38).

Regarding claims 4 and 11, Yoo teaches that the oscillation of wavelengths and settings of cross-connection are started/ended and defined/erased in response to the occurrence/disappearance of traffic from sub-network (inherent in that the conversion of wavelengths and switching of the wavelengths via the optical cross-connect is based on the traffic of the subnetwork).

Regarding claim 5 and 12, Yoo teaches the wavelength converting unit executes one-to-multiple communication by converting a wavelength into a plurality of wavelengths in response to a request for connection from one (1) client (as seen in Figure 11 wherein wavelength 1 is converted via WC1 to a number of different wavelengths).

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Regarding claims 6 and 13, Yoo teaches a plurality of selectable paths are set in a cross-connection ID identifying the path of the routing table (e.g. "forwarding table" throughout), with the priority being registered for each path (column 8 lines 40-41).

Regarding claims 7 and 14, Yoo teaches the priority is set based on the quality of the WDM signal at the receiving terminal (column 12 lines 1-13) and can be updated in response to disconnection or recovery of the path (column 9 lines 30-35).

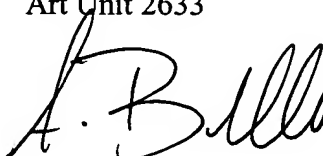
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (571) 272-3026. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Agustin Bello
Examiner
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A handwritten signature in black ink, appearing to read "A. Bello", is written over the printed name and title of the examiner.

AB